JC04 Rec'd PCT/PTO 24 OCT 2005 FORM 170-1390 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE (REV. 11-2004) 58086-224991 TRANSMITTAL LETTER TO THE UNITED STATES U.S. APPLICATION NO. (If known, see 37 CFR DESIGNATED/ELECTED OFFICE (DO/EO/US) **CONCERNING A FILING UNDER 35 U.S.C. 371** Not Yet INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMEI PCT/US2004/011955 April 15, 2004 April 22, 2003 TITLE OF INVENTION MICROMEMBRANE ACTUATOR APPLICANT(S) FOR DO/EO/US Gregory P. CARMAN and Daniel D. SHIN Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. 🛛 This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. The US has been elected by the expiration of 19 months from the priority date (Article 31). 5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)), published as WO 2004/094821 A2 b. A has been communicated by the International Bureau. (attached is form IB 308) c. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). b. has been previously submitted under 35 U.S.C. 154(d)(4) 7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)). a.

are attached hereto (required only if not communicated by the International Bureau). b. have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. 8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. A FIRST preliminary amendment. 14. An Application Data Sheet under 37 CFR 1.76. 15. A substitute specification.

This collection of information is required by 37 CFR 1.414 and 1.49-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Mail Stop PCT, commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

20. Other items or information: Formal Drawings (3 sheets), International Search Report, PTO/SB/08A and Form PCT/IB/304

17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.

19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

16. A power of attorney and/or change of address letter.

18. A second copy of the published international application under 35 U.S.C. 154(d)(4).

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u's. APPLICATION NO. (if known, see 37 CFR 1.5) Not Yet Assigned 17/554316 INTERNATIONAL APPLICATION NO. PCT/US2004/011955						ATTORNEY'S DOCKET NUMBER		
		710	PCT/US2004/011955			58086-224991		
	ring fees are submitt					\$300.00		
1 — <i>'</i>						\$200.00		
□ b) Examination fee\$200.00						\$500.00		
						\$500.00		
TOTAL OF ABOVE CALCULATIONS = \$1000.00								
						\$1000.00		
Additional fee for specification and drawings filed in paper over 100 sheet (excluding sequence listing or computer listing field in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.								
Total Sheets	Extra sheets		lumber of each additional 50 or fraction Thereof (round up to a whole number)		RATE			
-100 =	/50 =			-	x \$250.00			
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).						\$		
CLAIMS NUMBER FILED		ER FILED	NUMBER EXTRA	A RATE		\$		
Total claim	Total claims		8 .	x	\$50.00	\$400.00		
Independent daims		3- 3 =		x	\$200.00	\$		
MULTIPLE DEF	e)	+	\$360.00	\$				
TOTAL OF ABOVE CALCULATIONS =						\$1,400.00		
Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.						\$700.00		
SUBTOTAL =						\$700.00		
Processing fee of \$130.00 for furnishing the English translation later than 20 30 months from the earliest claimed priority date (37 CFR 1.492(f)).						\$		
TOTAL NATIO		n to the experience			,	\$700.00		
Fee for recording	g the enclosed assign	ment (37 CFR 1	1.21(h)). The assignment (\$40.00 per property	must be	accompanied +	\$		
S. 31. 35. 32.	9,0000000000000000000000000000000000000	Troine, circi,			NCLOSED =	\$700.00		
						Amount to be refunded:	\$	
						Amount to be charged:	\$	
a. A check in the amount of \$ to cover the above fees is enclosed.								
b. Please charge my Deposit Account No. 22-0261 in the amount of \$700.00 to cover the above fees.								
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>22-0261</u> . A duplicate copy of this sheet is enclosed.								
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.								
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.								
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SEND ALL CORRESPONDENCE TO:						ATURE 1	inwary_	
VENABLE LLP	_				C4		04.000=	
P.O. Box 34385 Washington D.O					Steve NAM	<u>en J. Schwartz, Octob</u> E	<u> </u>	
Phone No. 202-	Phone No. 202-344-4000 47,0						<u>70</u>	
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